

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 October 2006 (12.10.2006)

PCT

(10) International Publication Number
WO 2006/108050 A3

(51) International Patent Classification:
A61B 18/18 (2006.01)

(21) International Application Number:
PCT/US2006/012680

(22) International Filing Date: 5 April 2006 (05.04.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/668,822 5 April 2005 (05.04.2005) US
60/694,617 27 June 2005 (27.06.2005) US

(71) Applicant (for all designated States except US): **THE BRIGHAM AND WOMEN'S HOSPITAL** [US/US]; 75 Francis Street, Boston, Massachusetts 02115-5817 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **THOMPSON, Christopher, C.** [US/US]; 221 Longwood Avenue, Lmrc 401, Boston, Massachusetts 02115-5817 (US).

(74) Agents: **FASSE, J., Peter** et al.; Fish & Richardson P.C., P.O. Box 1022, Minneapolis, Minnesota 55440-1022 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

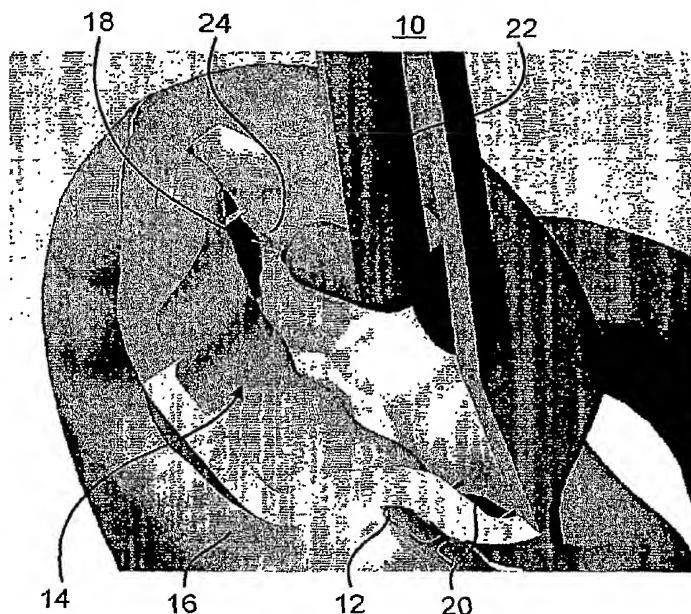
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: ENDOSCOPIC GASTRIC BYPASS DEFECT REPAIR



(57) Abstract: The invention relates to systems or kits and methods for repairing defects in gastric bypass operations, e.g., methods of closing intragastric fistulas (18, 20) and dilated gastrojejunal anastomoses. In various embodiments, an endoscopic suturing device (23) is inserted through a patient's mouth, down through the esophagus, and positioned in the region of the defect, e.g., fistula. Adjacent tissue is then acquired, e.g., by vacuum, and one or more stitches are placed through the tissue and tightened to at least partially close the fistula, forming a suture line. One or more reinforcing clips (30) and sealant (32) can be endoscopically applied to the suture line



WO 2006/108050 A3



(88) Date of publication of the international search report:
10 May 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(15) Information about Correction:

Previous Correction:

see PCT Gazette No. 48/2006 of 30 November 2006

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/12680

| | | |
|--|--|-----------------------|
| A. CLASSIFICATION OF SUBJECT MATTER IPC: A61B 18/18 (2006.01) USPC: 606/27 According to International Patent Classification (IPC) or to both national classification and IPC | | |
| B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 606/27-52, 128/898 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) | | |
| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | |
| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| A | US 5,759,185 A (Grinberg) 02 June 1998 (02.06.1998), entire document. | 1-23 |
| <input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex. | | |
| * Special categories of cited documents: | | |
| "A" document defining the general state of the art which is not considered to be of particular relevance | "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention | |
| "E" earlier application or patent published on or after the international filing date | "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone | |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art | |
| "O" document referring to an oral disclosure, use, exhibition or other means | "&" document member of the same patent family | |
| "P" document published prior to the international filing date but later than the priority date claimed | | |
| Date of the actual completion of the international search 19 December 2006 (19.12.2006) | Date of mailing of the international search report 27 MAR 2007 | |
| Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201 | Authorized officer Linda C Dvorak <i>Sharon D Greene for</i> Telephone No. 703 308 0858 | |